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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/622,241

07/18/2003

Steven E. Koenck

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EXAMINER

DAO, MINH D

ART UNIT

PAPER NUMBER

2618

MAIL DATE

DELIVERY MODE

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PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

## Office Action Summary

Application No.

10/622,241

Applicant(s)

KOENCK ET AL.

Examiner

MINH D. DAO

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2618

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 21-67 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 21-67 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau, (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_.

## DETAILED ACTION

### *Response to Arguments*

1. Applicant's arguments filed 01/22/07 with respect to the rejection(s) of claim(s) 21-67 under Downling (US 2006/0195551 A1) have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of Willkie et al. (US 6,230,012).

### *Claim Rejections - 35 USC § 102*

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 21-24,27-36,40-49,55-61,65-67 are rejected under 35 U.S.C. 102(e) as being anticipated by Willkie et al. (US 6,230,012).

Regarding claim 21, Willkie teaches a base module for use in a portable terminal utilizing a communication protocol stack having higher and lower layers, the portable

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terminal also comprising a communication module having a wireless transceiver and adapted to perform the functionality of the lower layers of the communication protocol stack (see figs. 2 and 4. In this case, the TE2 mobile device 102 and the MT2 104 device read on the Base module and the Communication device of the present invention.), the base module comprising:

a base memory adapted to store the higher layers of the communication protocol stack (see fig. 2; items 202-208);

and a base processor adapted to cooperate with the communication module to effect wireless communication by the communication module, the base processor being adapted to perform the functionality of the higher layers of the communication protocol stack stored in the base memory (see figs 2,4; col. 3, line 39 to col. 4, line 50). In this case, since the Mobile TE2 102 device can be a laptop or palmtop computer, it therefore inherently includes memory to store the protocol layers as in fig. 2 and also includes a processor to implement the protocol layers as described by Willkie.

Regarding claim 22, Willkie teaches the base processor's performance of the functionality of the higher layers of the communication protocol stack enables the base processor to cooperate with a communication module supporting substantially any type of wireless transceiver to effect wireless communication by the communication module (see figs 2,4; col. 3, line 39 to col. 4, line 50).

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Regarding claim 23, Willkie teaches the base module is configured to receive the communication module in an assembled position which communicatively couples the base processor and a module processor of the communication module (see figs 2,4; col. 3, line 39 to col. 4, line 50).

Regarding claim 24, Willkie teaches a base connector that is communicatively coupled to the base processor and that matingly engages a module connector disposed on the communication module upon receipt of the communication module into the base module in the assembled position (see figs 2,4; col. 3, line 39 to col. 4, line 50). In this case, the interface  $R_M$  connecting the two EIA-232 connectors of Willkie reads on the above limitation of the present invention.

Regarding claim 27, Willkie teaches the higher layers of the communication protocol stack stored by the base memory and performed by the base processor comprise a sessions layer (see figs 2,4; col. 3, line 39 to col. 4, line 50).

Regarding claim 28, Willkie teaches the higher layers of the communication protocol stack stored by the base memory and performed by the base processor comprise a transport layer (see figs 2,4; col. 3, line 39 to col. 4, line 50).

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Regarding claim 29, Willkie teaches the higher layers of the communication protocol stack stored by the base memory and performed by the base processor comprise a network layer (see figs 2,4; col. 3, line 39 to col. 4, line 50).

Regarding claim 30, Willkie teaches the base processor does not perform at least one lower layer function of the communication protocol stack, instead allowing the communication module to perform said at least one lower layer function of the communication protocol stack (see figs 2,4; col. 3, line 39 to col. 4, line 50).

Regarding claim 31, Willkie teaches the base processor does not perform the functionality of a physical layer of the communication protocol stack, instead allowing the communication module to perform the functionality of the physical layer (see figs 2,4; col. 3, line 39 to col. 4, line 50).

Regarding claim 32, Willkie teaches the base processor does not perform the functionality of a data link layer of the communication protocol stack, instead allowing the communication module to perform the functionality of the data link layer (see figs 2,4; col. 3, line 39 to col. 4, line 50).

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Regarding claim 33, Willkie teaches the base memory is adapted to store, and the base processor is adapted to perform the functionality of, a first subset of a network layer of the communication protocol stack, and wherein the base processor does not perform the functionality of a second subset of the network layer, instead allowing the communication module to perform the functionality of the second subset of the network layer (see figs 2,4; col. 3, line 39 to col. 4, line 50).

Regarding claim 34, the claim includes the limitations as that of claim 21, and therefore is interpreted and rejected for the same reason set forth in the rejection of claim 21.

Regarding claim 35, the claim includes the limitations as that of claim 23, and therefore is interpreted and rejected for the same reason set forth in the rejection of claim 23.

Regarding claim 36, the claim includes the limitations as that of claim 24, and therefore is interpreted and rejected for the same reason set forth in the rejection of claim 24.

Regarding claim 40, Willkie teaches the lower layers of the communication protocol stack support reliable transmission (see figs 2,4; col. 3, line 39 to col. 4, line 50).

Regarding claim 41, the claim includes the limitations as that of claim 32, and therefore is interpreted and rejected for the same reason set forth in the rejection of claim 32.

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Regarding claim 42, the claim includes the limitations as that of claim 31, and therefore is interpreted and rejected for the same reason set forth in the rejection of claim 31.

Regarding claim 43, the claim includes the limitations as that of claim 29, and therefore is interpreted and rejected for the same reason set forth in the rejection of claim 29.

Regarding claim 44, the claim includes the limitations as that of claim 30, and therefore is interpreted and rejected for the same reason set forth in the rejection of claim 30.

Regarding claim 45, the claim includes the limitations as that of claim 27, and therefore is interpreted and rejected for the same reason set forth in the rejection of claim 27.

Regarding claim 46, the claim includes the limitations as that of claim 28, and therefore is interpreted and rejected for the same reason set forth in the rejection of claim 28.

Regarding claim 47, the claim includes the limitations as that of claim 33, and therefore is interpreted and rejected for the same reason set forth in the rejection of claim 33.

Regarding claim 48, the claim includes the limitations as that of claim 21, and therefore is interpreted and rejected for the same reason set forth in the rejection of claim 21.



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Regarding claim 49, Willkie teaches the module processor, using the lower layers of the communication protocol stack, enables the base processor, using the higher layers of the communication protocol stack, to communicate with the wireless transceiver regardless of which of a plurality of communication modules is selected

Regarding claim 50, the claim includes the limitations as that of claim 24, and therefore is interpreted and rejected for the same reason set forth in the rejection of claim 24.

Regarding claim 55, the claim includes the limitations as that of claim 40, and therefore is interpreted and rejected for the same reason set forth in the rejection of claim 40.

Regarding claim 56, the claim includes the limitations as that of claim 41, and therefore is interpreted and rejected for the same reason set forth in the rejection of claim 41.

Regarding claim 57, the claim includes the limitations as that of claim 29, and therefore is interpreted and rejected for the same reason set forth in the rejection of claim 29.

Regarding claim 58, the claim includes the limitations as that of claim 21, and therefore is interpreted and rejected for the same reason set forth in the rejection of claim 21.

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Regarding claim 59, the claim includes the limitations as that of claim 24, and therefore is interpreted and rejected for the same reason set forth in the rejection of claim 24.

Regarding claim 60, the claim includes the limitations as that of claim 24, and therefore is interpreted and rejected for the same reason set forth in the rejection of claim 24.

Regarding claim 61, Willkie teaches the second set of instructions comprises at least a portion of the at least one middle layer of the communication protocol stack (see figs 2,4; col. 3, line 39 to col. 4, line 50).

Regarding claim 65, Willkie teaches a portion of the at least one middle layer of the communication protocol stack of the second set of instructions comprises support reliable transmission (see figs 2,4; col. 3, line 39 to col. 4, line 50).

Regarding claim 66, the claim includes the limitations as that of claim 32, and therefore is interpreted and rejected for the same reason set forth in the rejection of claim 32.

Regarding claim 67, the claim includes the limitations as that of claim 33, and therefore is interpreted and rejected for the same reason set forth in the rejection of claim 33.

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***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 25,26,37-39,51-54, 62-64 are rejected under 35 U.S.C. 103(a) as being unpatentable over Willkie et al. (US 6,230,012).

Regarding claims 25,26,37-39,51-54, 62-64, it is a well known in the art of cellular communication that the MT2 104 of Willkie is capable to support power saving for sleeping terminals and roaming terminals.

***Conclusion***

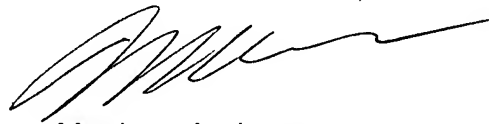
Any inquiry concerning this communication or earlier communications from the examiner should be directed to MINH D. DAO whose telephone number is 571-272-7851. The examiner can normally be reached on 8:30 AM - 5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, MATTHEW ANDERSON can be reached on 571-272-4177. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Minh Dao (mvd)  
AU 2618  
April 05, 2007



Matthew Anderson  
Supervisor AU 2618